

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number  
**WO 2004/113951 A2**

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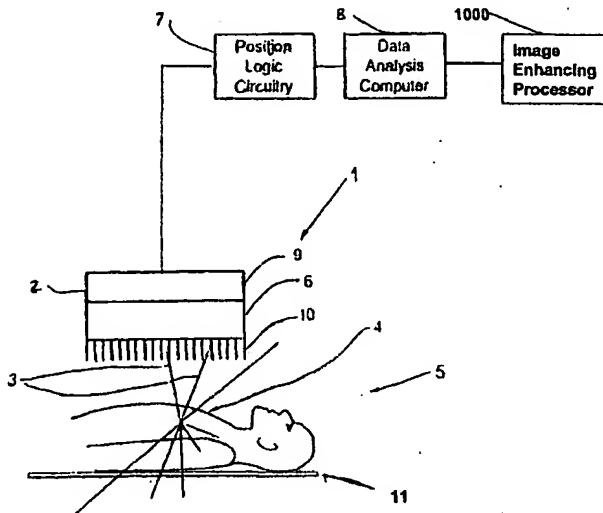
- |  |                              |   |
|--|------------------------------|---|
| (51) International Patent Classification <sup>7</sup> :  | G01T                         | (74) Agent: MILLER - SIERADZKI ADV. & PATENT ATTORNEYS; P.O.B. 6145, 31061 HAIFA (IL).  |
| (21) International Application Number:   | PCT/IL2004/000545            | (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW. |
| (22) International Filing Date:  | 20 June 2004 (20.06.2004)    | (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).  |
| (25) Filing Language:  | English                      |   |
| (26) Publication Language:   | English                      |   |
| (30) Priority Data:  |                              |   |
| 156569   | 22 June 2003 (22.06.2003) IL |   |
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Published:

— without international search report and to be republished upon receipt of that report

*[Continued on next page]*

(54) Title: ENHANCED PLANAR SINGLE PHOTON EMISSION IMAGING



(57) Abstract: A method of obtaining a planar image of a portion of a body and enhancing image quality of at least one specific organ or volume of interest located within the portion of the body, administered with radio-pharmaceutical substance radiating gamma rays, by using single photon emission imaging, for determination of functional information thereon. The method comprises the steps of: (a) acquiring at least one projection data of said portion of the body, by means of a gamma camera detector; (b) determining the effective distance between the detector and the specific organ of interest; (c) calculating weight values taking into account acceptance angles of the gamma camera detector and the effective distance; (d) obtaining a two dimensional image of a spatial distribution of the pharmaceutical substance within the portion of the body by mathematically analyzing said data in conjunction with weight values.

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